Partial Listing

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United States Patent [19]

Fox

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[54] METHOD AND SYSTEM FOR INVENTORY MANAGEMENT

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Related U.S. Application Data

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[51] Int. Cl.[7] G06F 17/30

[52] U.S. Cl. 707/104; 705/8; 705/10; 705/28; 707/104

[58] Field of Search 707/103, 104; 705/10, 26, 27, 28, 2, 4, 8

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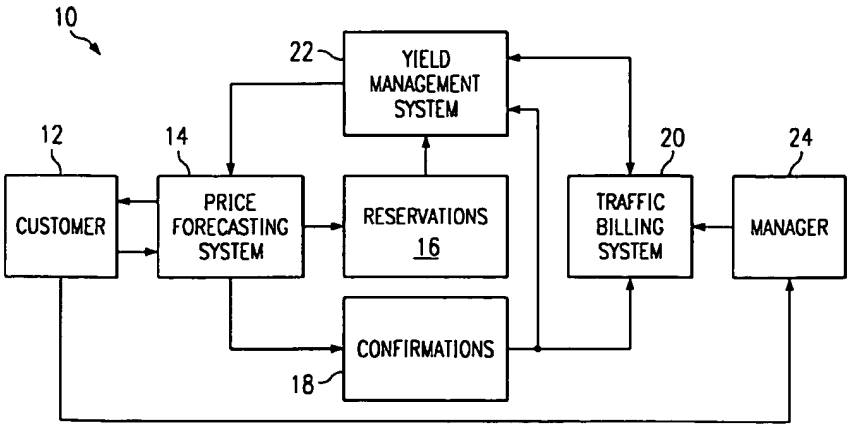
[57] ABSTRACT

A method is provided for inventory management which includes an initial step of receiving a customer request for an inventory item and then generating a table or menu of one or more inventory items that most closely correspond to the customer request using a price forecasting system. Based on negotiations concerning price, timing and other typical concerns, an item is selected from the table and a price quotation associated with the selected inventory item is generated using the price forecasting system, which price quotation has been predetermined by a yield management system using a pricing strategy. The customer information associated with the customer request is input into a traffic billing system. Information needed for price recalculation associated with the customer request is input into the yield management system. The yield management system recalculates pricing data with in a manner consistent with a pricing strategy implemented by the yield management system, so that price changes caused by a reduction in available inventory due to the customer request are taken into account, and the pricing data accessed by the price forecasting system when a price quotation is generated is updated prior to repeating the process for a subsequent customer request. This method provides more accurate pricing than known systems where order information must be entered manually before a price recalculation can take place, and the yield management system overestimates the amount of available inventory. If the customer request comprises a reservation having an associated probability of later becoming an order, the reservation is taken into account when recalculating prices based on available inventory. Such a process may be integrated for an enterprise made up of a number of member stations each having associated inventory for sale.

15 Claims, 6 Drawing Sheets



US-PAT-NO: 6061691

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TITLE: Method and system for **inventory** management

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TITLE - TI (1):
Method and system for **inventory** management

Brief Summary Text - BSTX (10):
A second key factor towards enhancing the accuracy of a pricing forecast is taking into account reservations made by customers who want to hold a future time slot for future use but do not place a firm order until much nearer the time of the broadcast. Presently available systems do not take reservations or historically repeated last minute time purchases into account, further distorting the actual value of the time inventory. A comparable problem is presented by allocation of program time to large advertisers that wish to **reserve** large amounts of time in many small blocks.

Detailed Description Text - DETX (26):
If the customer decides to buy time rather than merely **reserve** it at a decision 36, the system proceeds through decisions 36 and 37 to a step 38 wherein the date and time of the purchase, the time block or segment sold, the price, the sales information for the customer, and other customer sales information is entered into the price forecasting system 14 to be forwarded to the yield management system 22 and traffic billing system (TBS) 20 (see FIG. 1). Upon connecting to the yield management system at step 39 and imparting the relevant information, yield management system 22 recalculates A and F.sub.N
based on the amount of time sold S at step 41. Demand curve statistics, namely the applicable percent availability, are then updated at step 42, and the update is sent to the price forecasting system (PFS) 14 at step 43. Finally, at step 44, the price forecasting system 14 connects to the traffic billing system 20 and the accounting, scheduling and processing information are entered
for that sale. The process then resets and returns to start waiting for the

next customer inquiry 33.

Detailed Description Text - DETX (27):

The process is mostly the same if the customer decides to **reserve** time (yes at decision 36) rather than place a firm order that gives rise to a confirmation 18 as discussed above. Steps 46 and 47 proceed in the same manner
as the corresponding steps 38 and 39. If customer 12 opts in favor of a reservation instead of a firm order, then such information is entered as a reservation 16 instead of a confirmation 18. At step 48, which corresponds to step 41 for an order, A and F.sub.N are recalculated based on an adjusted amount of time sold S. Step 48 preferably comprises generating prices for price quotations using the function P.sub.H =P.sub.L *F.sub.H, where P.sub.H is the final price when 100% of inventory associated with the formula has been sold, P.sub.L is the starting price when 0% of the inventory has been sold, and F is a function that determines the applicable price at inventory levels between the staring and final prices, with F.sub.H representing the value of function F when 100% of inventory has been sold. The weight assigned to orders and reservations affects the inventory level used by the function F in generating a price for the next price quotation to be generated.